Middle Potomac

Animal Waste Management Systems: Livestock

TS Goal: 27 systems
Definition: Systems for the proper handling, storage, and use of waste generated by confined animal facilities. These include ponds, lagoons, and tanks for liquid waste, and sheds or pits for solid waste.
Applied to: manure acres (stored manure)
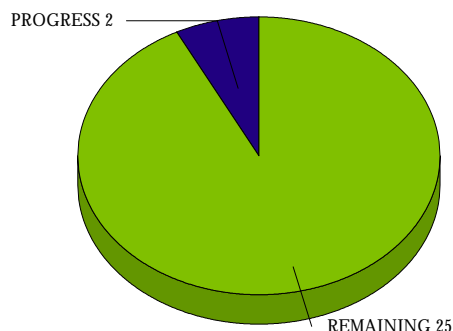**Nitrogen Efficiency:** 75% reduction
Phosphorus Efficiency: 75% reduction
BMP Rankings:
    Ability to Reduce Nutrients: High
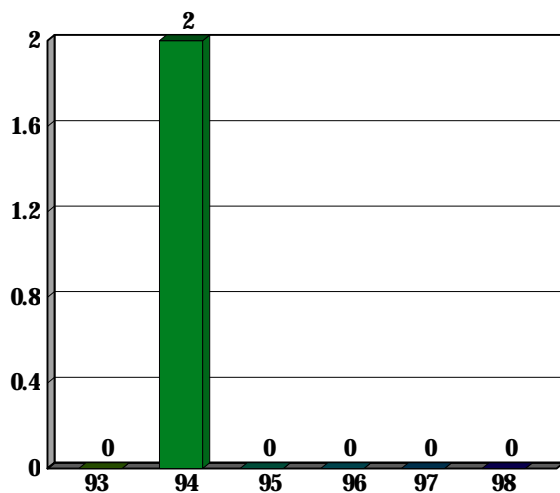   **Importance in Statewide Strategy:**
        Nitrogen - High
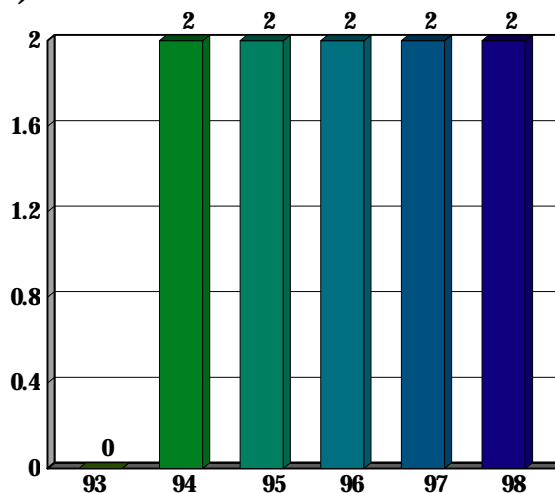   **Phosphorus** - High

PROGRESS 2

REMAINING 25

1998 Progress for Animal Waste Management Systems: Livestock
(as a percentage of TS goal, labeled units are systems)

Implementation Record

(systems)

93	94	95	96	97	98
0	2	0	0	0	0

Annual

93	94	95	96	97	98
0	2	2	2	2	2

Cumulative

NOTES: (1) Implementation data is organized by State fiscal year (i.e. 1994 = July 1, 1993 - June 30, 1994). (2) Most implementation data is based on State program activities, funding and/or requirements. (3) BMP definitions are from "Maryland's Tributary Strategies for Nutrient Reduction" report, 1995. (4) BMP implementation data is from the Maryland Interagecy Tracking Subcommittee. (5) Efficiencies are average statewide efficiencies. (6) Ongoing improvements to the Watershed Model shift the expected reductions of BMPs with efficiencies listed as "land use conversions" slightly.

Middle Potomac

Conservation Tillage

TS Goal: 29,691 acres
Definition: A process that uses tillage equipment to seed the crop directly into the vegetative cover or crop residue on the surface, with minimal soil disturbance.
Applied to: hitill and lotill land
Nitrogen Efficiency: land conversion reduction
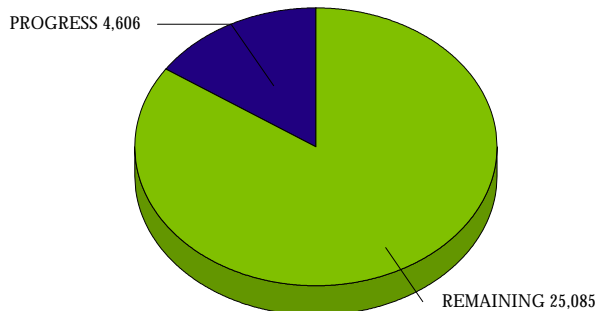**Phosphorus Efficiency:** land conversion reduction
BMP Rankings:
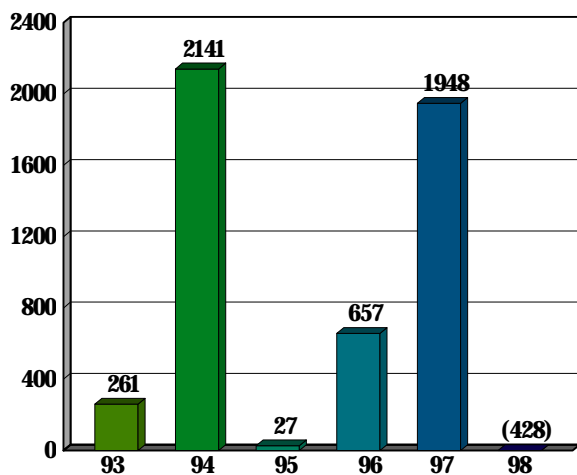   **Ability to Reduce Nutrients:** High
    Importance in Statewide Strategy:
        Nitrogen - High
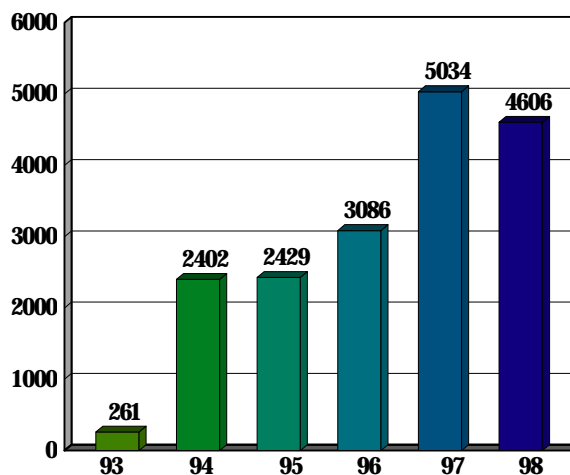   **Phosphorus** - High

PROGRESS 4,606
REMAINING 25,085

1998 Progress for Conservation Tillage
(as a percentage of TS goal, labeled units are acres)

Implementation Record
(acres)

Annual

Year	Acres
93	261
94	2141
95	27
96	657
97	1948
98	(428)

Cumulative

Year	Acres
93	261
94	2402
95	2429
96	3086
97	5034
98	4606

NOTES: (1) Implementation data is organized by State fiscal year (i.e. 1994 = July 1, 1993 - June 30, 1994). (2) Most implementation data is based on State program activities, funding and/or requirements. (3) BMP definitions are from "Maryland's Tributary Strategies for Nutrient Reduction" report, 1995. (4) BMP implementation data is from the Maryland Interagecy Tracking Subcommittee. (5) Efficiencies are average statewide efficiencies. (6) Ongoing improvements to the Watershed Model shift the expected reductions of BMPs with efficiencies listed as "land use conversions" slightly.

Middle Potomac

Cover Crops

TS Goal: 1,800 acres

Definition: Small grains planted in September or early October on land otherwise fallow with no fertilizer applied. This practice reduces nitrate leaching losses during the winter, and also reduces erosion.

Applied to: hitill and lotill land

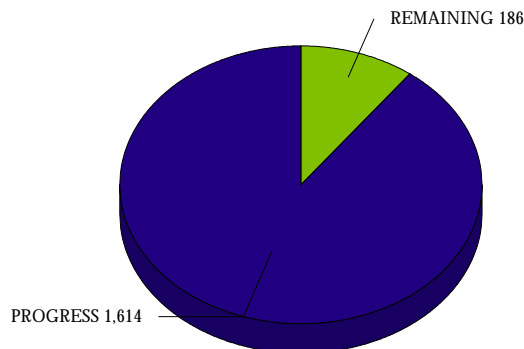**Nitrogen Efficiency:** 59% reduction

Phosphorus Efficiency: 44% reduction

BMP Rankings:

    Ability to Reduce Nutrients: High
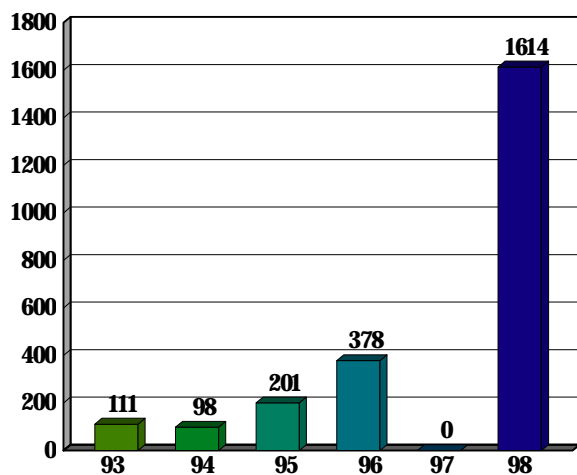
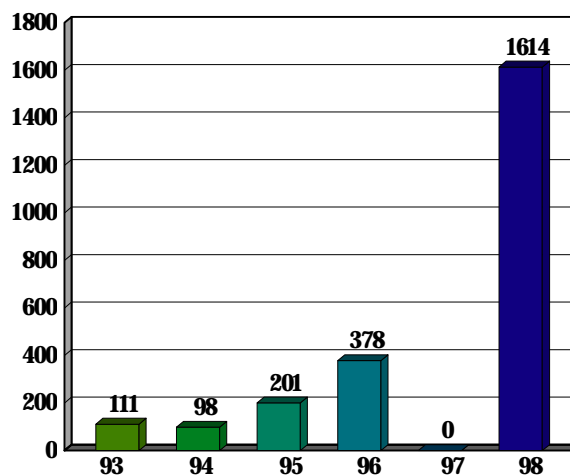   **Importance in Statewide Strategy:**

        Nitrogen - High

        Phosphorus - High

REMAINING 186

PROGRESS 1,614

1998 Progress for Cover Crops
(as a percentage of TS goal, labeled units are acres)

Implementation Record
(acres)

Annual

Year	93	94	95	96	97	98
Acres	111	98	201	378	0	1614

Cumulative

Year	93	94	95	96	97	98
Acres	111	98	201	378	0	1614

NOTES: (1) Implementation data is organized by State fiscal year (i.e. 1994 = July 1, 1993 - June 30, 1994). (2) Most implementation data is based on State program activities, funding and/or requirements. (3) BMP definitions are from "Maryland's Tributary Strategies for Nutrient Reduction" report, 1995. (4) BMP implementation data is from the Maryland Interagecy Tracking Subcommittee. (5) Efficiencies are average statewide efficiencies. (6) Ongoing improvements to the Watershed Model shift the expected reductions of BMPs with efficiencies listed as "land use conversions" slightly.

Middle Potomac

Nutrient Management Plan Implementation

TS Goal: 50,000 acres
Definition: A comprehensive plan to manage the amount, placement, timing and application of animal waste, fertilizer, sludge, or other plant nutrients.
Applied to: cropland
Nitrogen Efficiency: model-derived reduction
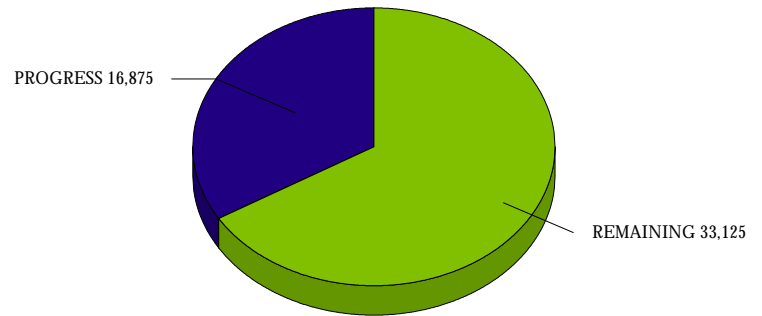**Phosphorus Efficiency:** model-derived reduction
BMP Rankings:
   Ability to Reduce Nutrients: Medium
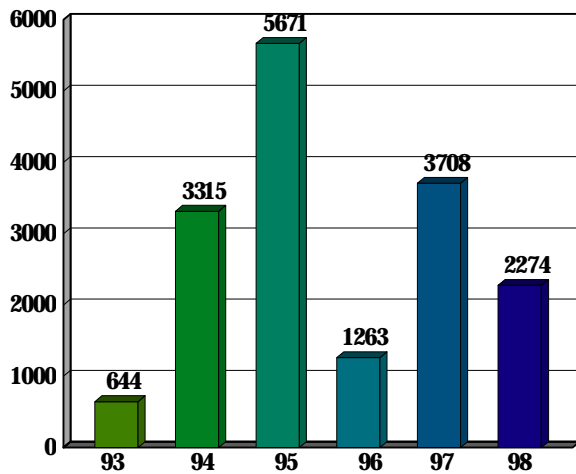   **Importance in Statewide Strategy:**
         Nitrogen - High
         Phosphorus - High
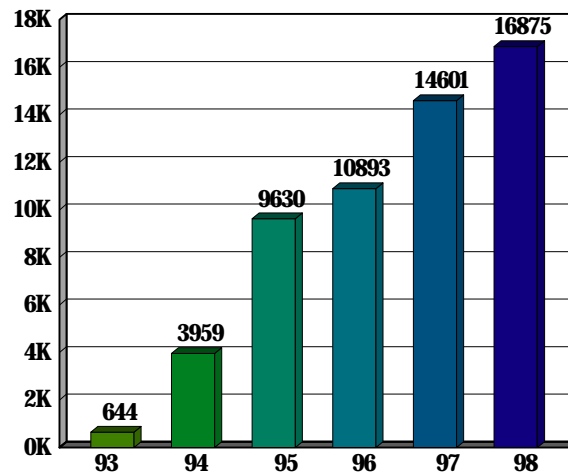
PROGRESS 16,875

REMAINING 33,125

1998 Progress for Nutrient Management Plan Implementation
(as a percentage of TS goal, labeled units are acres)

Implementation Record
(acres)

Annual

Year	Acres
93	644
94	3315
95	5671
96	1263
97	3708
98	2274

Cumulative

Year	Acres
93	644
94	3959
95	9630
96	10893
97	14601
98	16875

NOTES: (1) Implementation data is organized by State fiscal year (i.e. 1994 = July 1, 1993 - June 30, 1994). (2) Most implementation data is based on State program activities, funding and/or requirements. (3) BMP definitions are from "Maryland's Tributary Strategies for Nutrient Reduction" report, 1995. (4) BMP implementation data is from the Maryland Interagecy Tracking Subcommittee. (5) Efficiencies are average statewide efficiencies. (6) Ongoing improvements to the Watershed Model shift the expected reductions of BMPs with efficiencies listed as "land use conversions" slightly.

Middle Potomac

Retirement of Highly Erodible Land

TS Goal: 1,600 acres
Definition: An accelerated application of practices used in SCWQPs on lands with a high potential for soil loss.
Applied to: cropland and pasture
Nitrogen Efficiency: land conversion reduction
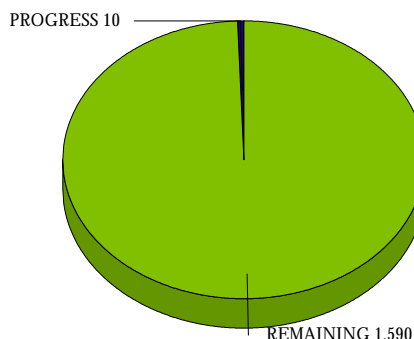**Phosphorus Efficiency:** land conversion reduction
BMP Rankings:
    Ability to Reduce Nutrients: High
    Importance in Statewide Strategy:
        Nitrogen - Medium
        Phosphorus - Medium

PROGRESS 10

REMAINING 1,590

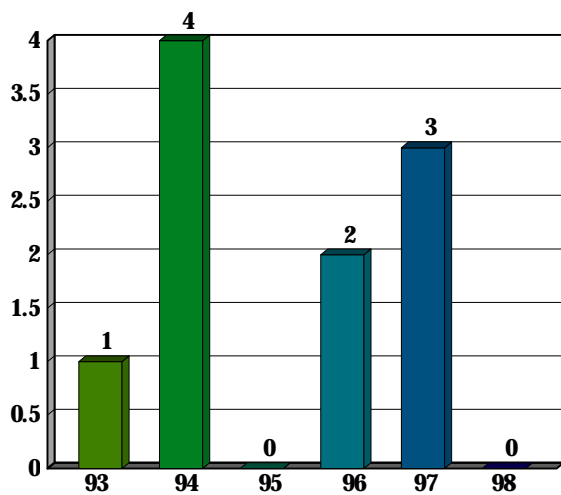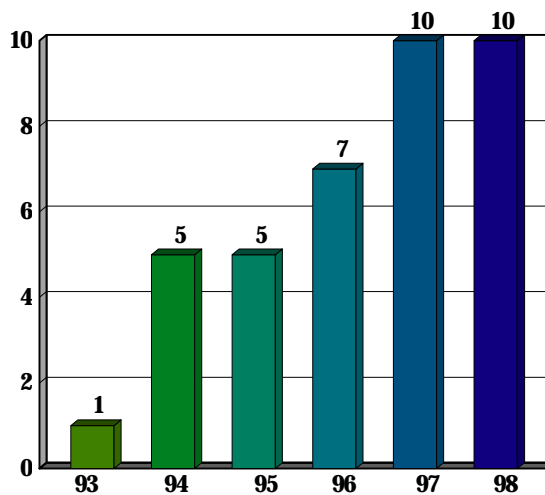**1998 Progress for Retirement of Highly Erodible Land
(as a percentage of TS goal, labeled units are acres)**

Implementation Record
(acres)

Annual

93	94	95	96	97	98
1	4	0	2	3	0

Cumulative

93	94	95	96	97	98
1	5	5	7	10	10

NOTES: (1) Implementation data is organized by State fiscal year (i.e. 1994 = July 1, 1993 - June 30, 1994). (2) Most implementation data is based on State program activities, funding and/or requirements. (3) BMP definitions are from "Maryland's Tributary Strategies for Nutrient Reduction" report, 1995. (4) BMP implementation data is from the Maryland Interagecy Tracking Subcommittee. (5) Efficiencies are average statewide efficiencies. (6) Ongoing improvements to the Watershed Model shift the expected reductions of BMPs with efficiencies listed as "land use conversions" slightly.

Middle Potomac

Runoff Control

TS Goal: 27 systems
Definition: Systems for the proper handling, storage, and use of waste generated by confined animal facilities. These include ponds, lagoons, and tanks for liquid waste, and sheds or pits for solid waste.
Applied to: manure
Nitrogen Efficiency: 10% reduction
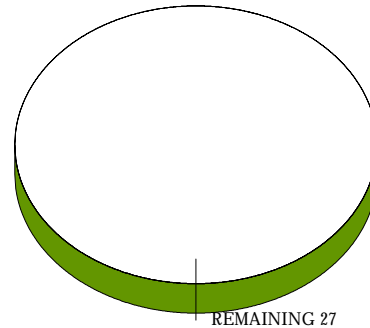**Phosphorus Efficiency:** 10% reduction
BMP Rankings:
    Ability to Reduce Nutrients: High
    Importance in Statewide Strategy:
        Nitrogen - Medium
        Phosphorus - Medium

REMAINING 27

1998 Progress for Runoff Control
(as a percentage of TS goal, labeled units are systems)

Implementation Record
(systems)

Annual

Cumulative

NOTES: (1) Implementation data is organized by State fiscal year (i.e. 1994 = July 1, 1993 - June 30, 1994). (2) Most implementation data is based on State program activities, funding and/or requirements. (3) BMP definitions are from "Maryland's Tributary Strategies for Nutrient Reduction" report, 1995. (4) BMP implementation data is from the Maryland Interagecy Tracking Subcommittee. (5) Efficiencies are average statewide efficiencies. (6) Ongoing improvements to the Watershed Model shift the expected reductions of BMPs with efficiencies listed as "land use conversions" slightly.

Middle Potomac

SCWQP Implementation and Treatment of Highly Erodible Land

TS Goal: 41,007 acres

Definition: A comprehensive plan addressing natural resource management of farmland directed toward the control of erosion and sediment loss, and management of animal waste or agricultural chemicals.

Applied to: cropland and pasture

Nitrogen Efficiency: 11% reduction
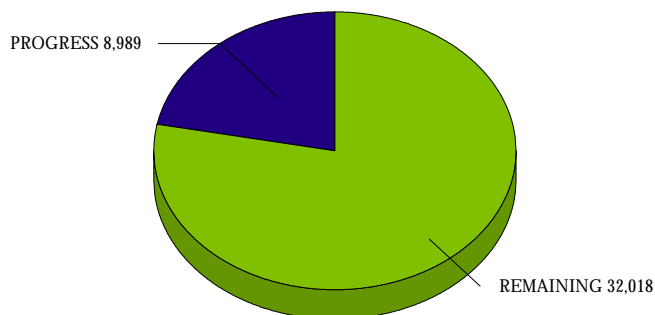
Phosphorus Efficiency: 21% reduction

BMP Rankings:
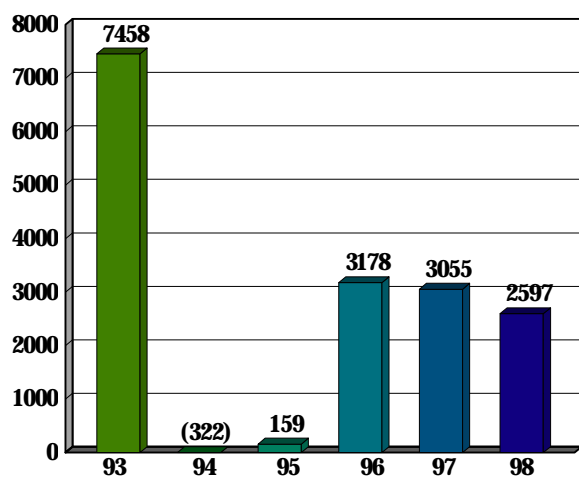   **Ability to Reduce Nutrients:** Low
    Importance in Statewide Strategy:
        Nitrogen - High
        Phosphorus - High
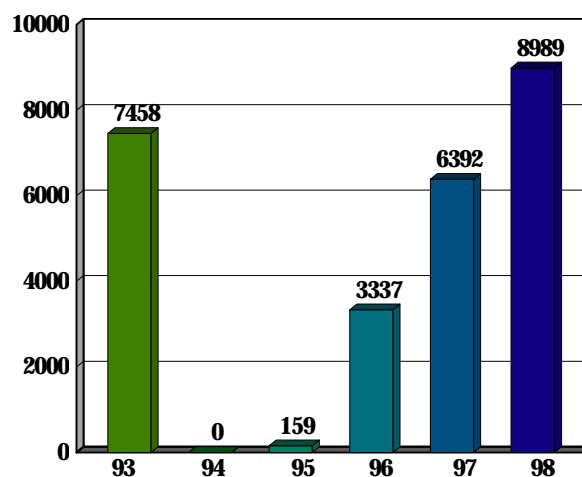
PROGRESS 8,989

REMAINING 32,018

1998 Progress for SCWQP Implementation and Treatment of Highly Erodible Land (as a percentage of TS goal, labeled units are acres)

Implementation Record
(acres)

Annual

Year	Acres
93	7458
94	(322)
95	159
96	3178
97	3055
98	2597

Cumulative

Year	Acres
93	7458
94	0
95	159
96	3337
97	6392
98	8989

NOTES: (1) Implementation data is organized by State fiscal year (i.e. 1994 = July 1, 1993 - June 30, 1994). (2) Most implementation data is based on State program activities, funding and/or requirements. (3) BMP definitions are from "Maryland's Tributary Strategies for Nutrient Reduction" report, 1995. (4) BMP implementation data is from the Maryland Interagecy Tracking Subcommittee. (5) Efficiencies are average statewide efficiencies. (6) Ongoing improvements to the Watershed Model shift the expected reductions of BMPs with efficiencies listed as "land use conversions" slightly.

Middle Potomac

Stream Protection with Fencing

TS Goal: 8 acres
Definition: Fencing along streams to completely exclude livestock from the stream. Also improves streambank stability and reduces sedimentation.
Applied to: pasture
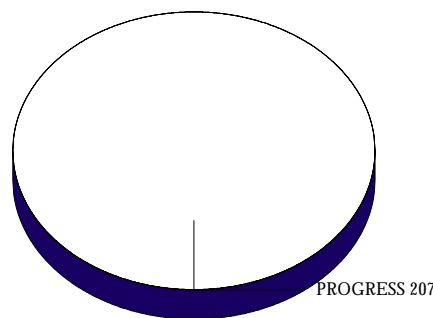**Nitrogen Efficiency:** 75% reduction
Phosphorus Efficiency: 75% reduction
BMP Rankings:
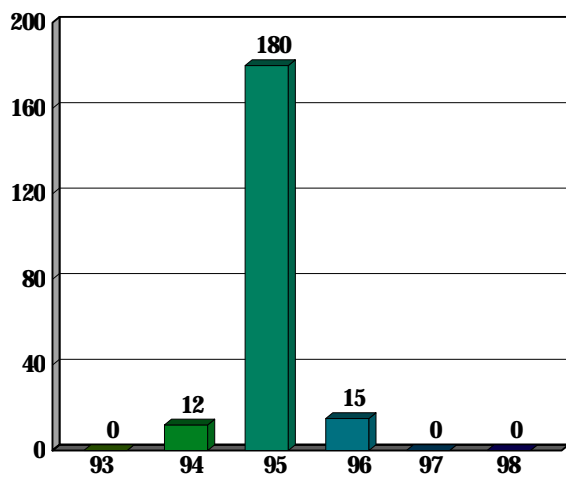 **Ability to Reduce Nutrients:** High
  Importance in Statewide Strategy:
        Nitrogen - Low
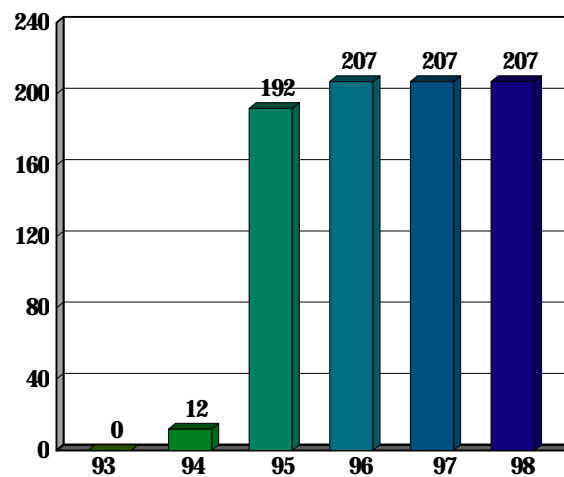   **Phosphorus** - Low

PROGRESS 207

**1998 Progress for Stream Protection with Fencing
(as a percentage of TS goal, labeled units are acres)**

Implementation Record
(acres)

Annual

Year	Value
93	0
94	12
95	180
96	15
97	0
98	0

Cumulative

Year	Value
93	0
94	12
95	192
96	207
97	207
98	207

NOTES: (1) Implementation data is organized by State fiscal year (i.e. 1994 = July 1, 1993 - June 30, 1994). (2) Most implementation data is based on State program activities, funding and/or requirements. (3) BMP definitions are from "Maryland's Tributary Strategies for Nutrient Reduction" report, 1995. (4) BMP implementation data is from the Maryland Interagecy Tracking Subcommittee. (5) Efficiencies are average statewide efficiencies. (6) Ongoing improvements to the Watershed Model shift the expected reductions of BMPs with efficiencies listed as "land use conversions" slightly.

Middle Potomac

Stream Protection without Fencing

TS Goal: 36 acres
Definition: Providing troughs or other watering devices in remote locations away from the stream to discourage animals from entering the stream, and the provision of some fencing adjacent to stream crossings to limit access points.
Applied to: pasture
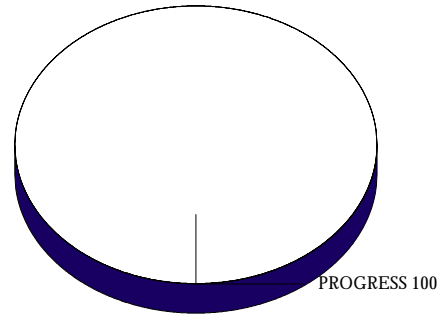**Nitrogen Efficiency:** 38% reduction
Phosphorus Efficiency: 38% reduction
BMP Rankings:
    Ability to Reduce Nutrients: Medium
    Importance in Statewide Strategy:
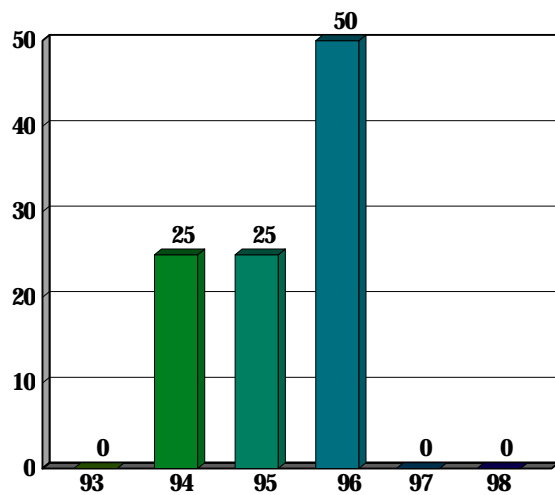   **Nitrogen** - Low
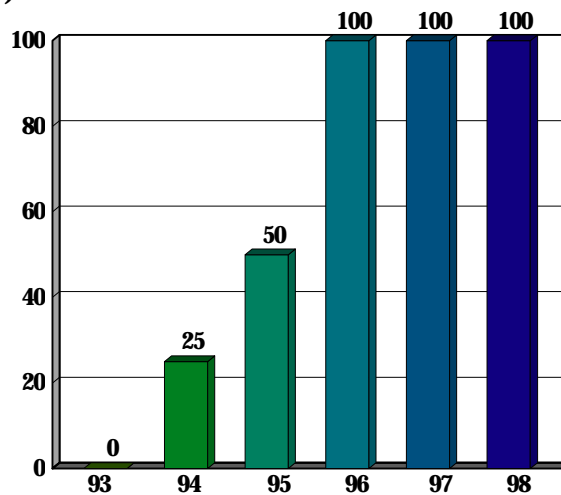   **Phosphorus** - Low

PROGRESS 100

**1998 Progress for Stream Protection without Fencing
(as a percentage of TS goal, labeled units are acres)**

Implementation Record
(acres)

Annual

Year	Value
93	0
94	25
95	25
96	50
97	0
98	0

Cumulative

Year	Value
93	0
94	25
95	50
96	100
97	100
98	100

NOTES: (1) Implementation data is organized by State fiscal year (i.e. 1994 = July 1, 1993 - June 30, 1994). (2) Most implementation data is based on State program activities, funding and/or requirements. (3) BMP definitions are from "Maryland's Tributary Strategies for Nutrient Reduction" report, 1995. (4) BMP implementation data is from the Maryland Interagecy Tracking Subcommittee. (5) Efficiencies are average statewide efficiencies. (6) Ongoing improvements to the Watershed Model shift the expected reductions of BMPs with efficiencies listed as "land use conversions" slightly.

Middle Potomac

Forest Conservation

TS Goal: 2,273 acres
Definition: Implementation of the Forest Conservation Act, which requires the retention of a portion of forested lands on any newly developed site.
Applied to: urban land
Nitrogen Efficiency: land conversion reduction
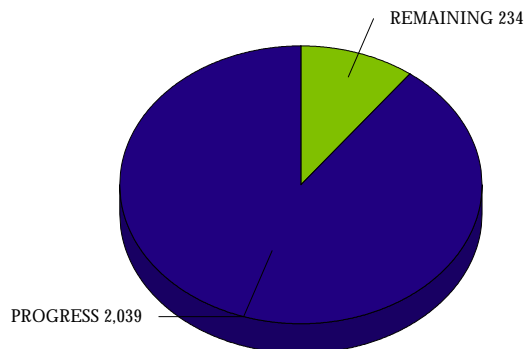**Phosphorus Efficiency:** land conversion reduction
BMP Rankings:
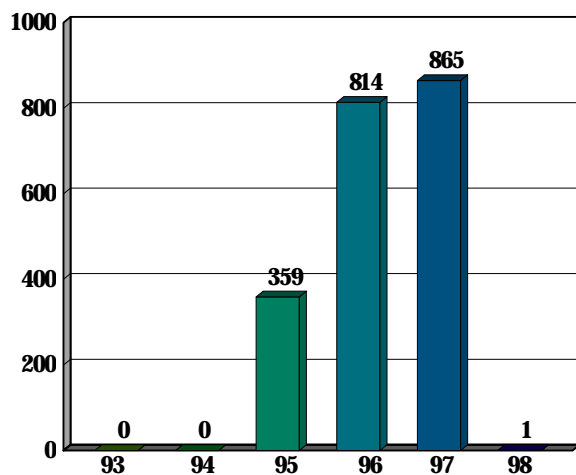 **Ability to Reduce Nutrients:** High
  Importance in Statewide Strategy:
    Nitrogen - Medium
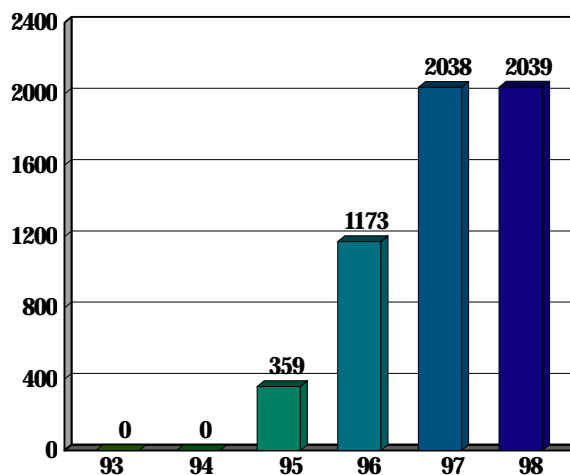   **Phosphorus** - Medium

REMAINING 234

PROGRESS 2,039

1998 Progress for Forest Conservation
(as a percentage of TS goal, labeled units are acres)

Implementation Record
(acres)

Annual:
- 93: 0
- 94: 0
- 95: 359
- 96: 814
- 97: 865
- 98: 1

Annual

Cumulative:
- 93: 0
- 94: 0
- 95: 359
- 96: 1173
- 97: 2038
- 98: 2039

Cumulative

NOTES: (1) Implementation data is organized by State fiscal year (i.e. 1994 = July 1, 1993 - June 30, 1994). (2) Most implementation data is based on State program activities, funding and/or requirements. (3) BMP definitions are from "Maryland's Tributary Strategies for Nutrient Reduction" report, 1995. (4) BMP implementation data is from the Maryland Interagecy Tracking Subcommittee. (5) Efficiencies are average statewide efficiencies. (6) Ongoing improvements to the Watershed Model shift the expected reductions of BMPs with efficiencies listed as "land use conversions" slightly.

Middle Potomac

Forest Harvesting Practices

TS Goal: 888 acres
Definition: Application of regulatory and voluntary best management practices applied to timber harvests, including erosion and sediment control and streamside management zones.
Applied to: forest land
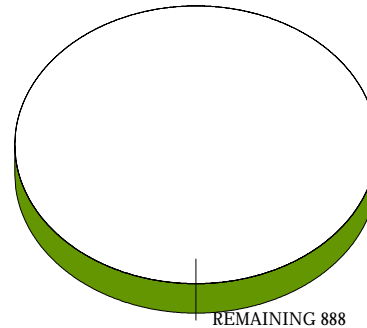**Nitrogen Efficiency:** 50% reduction
Phosphorus Efficiency: 50% reduction
BMP Rankings:
   Ability to Reduce Nutrients: Low
   Importance in Statewide Strategy:
       Nitrogen - Low
       Phosphorus - Low

REMAINING 888

1998 Progress for Forest Harvesting Practices
(as a percentage of TS goal, labeled units are acres)

Implementation Record
(acres)

Annual   **Cumulative**

NOTES: (1) Implementation data is organized by State fiscal year (i.e. 1994 = July 1, 1993 - June 30, 1994). (2) Most implementation data is based on State program activities, funding and/or requirements. (3) BMP definitions are from "Maryland's Tributary Strategies for Nutrient Reduction" report, 1995. (4) BMP implementation data is from the Maryland Interagecy Tracking Subcommittee. (5) Efficiencies are average statewide efficiencies. (6) Ongoing improvements to the Watershed Model shift the expected reductions of BMPs with efficiencies listed as "land use conversions" slightly.

Middle Potomac

Forested Buffers

TS Goal: 180 acres
Definition: A linear strip of forest along rivers and streams that filters nutrients and sediment and enhances stream habitat.
Applied to: cropland and pasture
Nitrogen Efficiency: 56% reduction
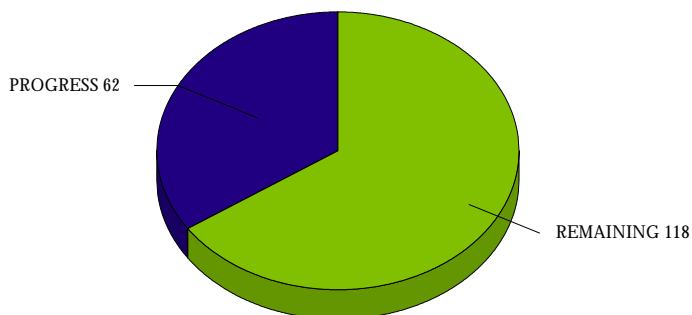**Phosphorus Efficiency:** 70% reduction
BMP Rankings:
    Ability to Reduce Nutrients: High
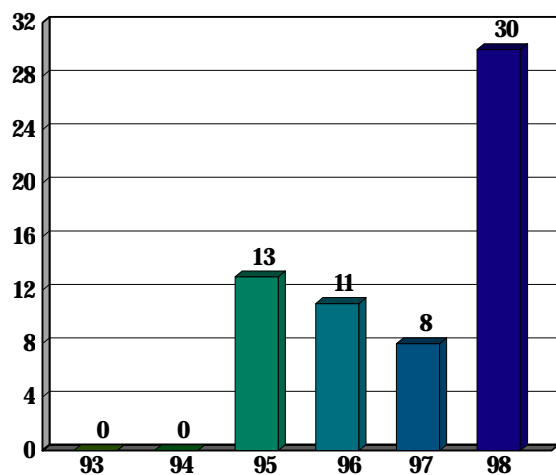   **Importance in Statewide Strategy:**
        Nitrogen - Medium
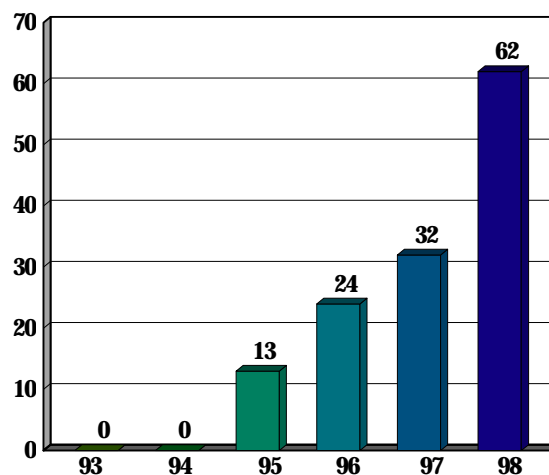   **Phosphorus** - Medium

PROGRESS 62

REMAINING 118

**1998 Progress for Forested Buffers
(as a percentage of TS goal, labeled units are acres)**

Implementation Record
(acres)

Annual

Year	Acres
93	0
94	0
95	13
96	11
97	8
98	30

Cumulative

Year	Acres
93	0
94	0
95	13
96	24
97	32
98	62

NOTES: (1) Implementation data is organized by State fiscal year (i.e. 1994 = July 1, 1993 - June 30, 1994). (2) Most implementation data is based on State program activities, funding and/or requirements. (3) BMP definitions are from "Maryland's Tributary Strategies for Nutrient Reduction" report, 1995. (4) BMP implementation data is from the Maryland Interagecy Tracking Subcommittee. (5) Efficiencies are average statewide efficiencies. (6) Ongoing improvements to the Watershed Model shift the expected reductions of BMPs with efficiencies listed as "land use conversions" slightly.

Middle Potomac

Grassed Buffers

TS Goal: 100 acres
Definition: A linear strip of grass along rivers and streams that filters nutrients and sediment and enhances stream habitat.
Applied to: cropland and pasture
Nitrogen Efficiency: 41% reduction
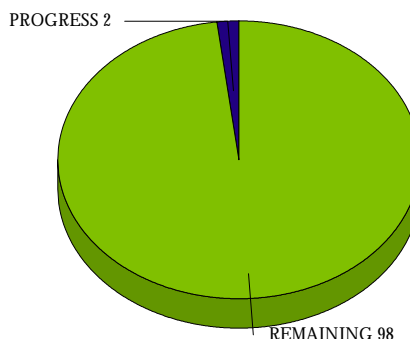**Phosphorus Efficiency:** 53% reduction
BMP Rankings:
    Ability to Reduce Nutrients: High
    Importance in Statewide Strategy:
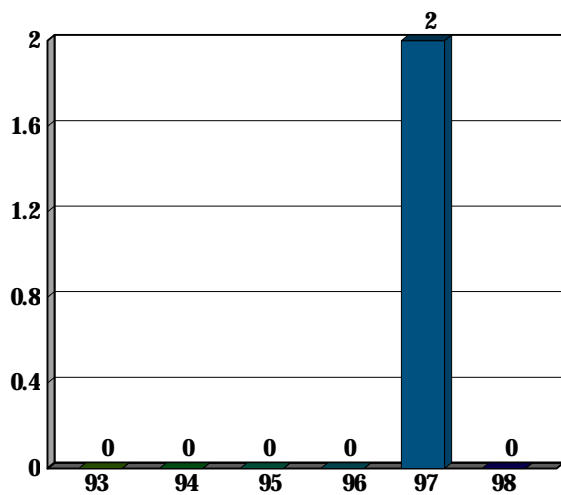   **Nitrogen** - Medium
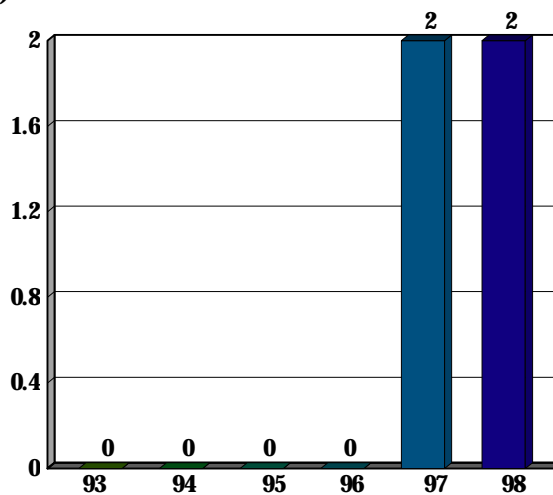   **Phosphorus** - Medium

PROGRESS 2

REMAINING 98

**1998 Progress for Grassed Buffers
(as a percentage of TS goal, labeled units are acres)**

Implementation Record
(acres)

Annual

Year	93	94	95	96	97	98
Value	0	0	0	0	2	0

Cumulative

Year	93	94	95	96	97	98
Value	0	0	0	0	2	2

NOTES: (1) Implementation data is organized by State fiscal year (i.e. 1994 = July 1, 1993 - June 30, 1994). (2) Most implementation data is based on State program activities, funding and/or requirements. (3) BMP definitions are from "Maryland's Tributary Strategies for Nutrient Reduction" report, 1995. (4) BMP implementation data is from the Maryland Interagecy Tracking Subcommittee. (5) Efficiencies are average statewide efficiencies. (6) Ongoing improvements to the Watershed Model shift the expected reductions of BMPs with efficiencies listed as "land use conversions" slightly.

Middle Potomac

Marine Pumpouts (installation)

TS Goal: 2 marinas
Definition: A facility sited at marinas for pumping sewage from boat holding tanks to a dockside storage facility.
Applied to:
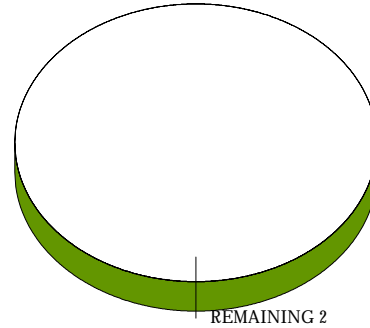**Nitrogen Efficiency:** pound reduction
Phosphorus Efficiency: pound reduction
BMP Rankings:
    Ability to Reduce Nutrients: High
    Importance in Statewide Strategy:
        Nitrogen - Medium
        Phosphorus - Medium

REMAINING 2

1998 Progress for Marine Pumpouts (installation)
(as a percentage of TS goal, labeled units are marinas)

Implementation Record
(marinas)

Annual

Cumulative

NOTES: (1) Implementation data is organized by State fiscal year (i.e. 1994 = July 1, 1993 - June 30, 1994). (2) Most implementation data is based on State program activities, funding and/or requirements. (3) BMP definitions are from "Maryland's Tributary Strategies for Nutrient Reduction" report, 1995. (4) BMP implementation data is from the Maryland Interagecy Tracking Subcommittee. (5) Efficiencies are average statewide efficiencies. (6) Ongoing improvements to the Watershed Model shift the expected reductions of BMPs with efficiencies listed as "land use conversions" slightly.

Nonstructural Shore Erosion Control

TS Goal: 3,800 linear feet
Definition: A practice for stabilizing eroding shorelines by establishing marsh grasses; suitable for sites with lower wave energy. Also creates wetland habitat.
Applied to:
Nitrogen Efficiency: 66 lbs per l.f. reduction
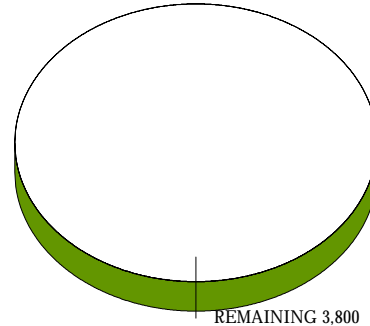**Phosphorus Efficiency:** 40 lbs per l.f. reduction
BMP Rankings:
   Ability to Reduce Nutrients: Low
   Importance in Statewide Strategy:
      Nitrogen - Medium
      Phosphorus - Medium

REMAINING 3,800

1998 Progress for Nonstructural Shore Erosion Control
(as a percentage of TS goal, labeled units are linear feet)

Implementation Record
(linear feet)

Annual

Cumulative

NOTES: (1) Implementation data is organized by State fiscal year (i.e. 1994 = July 1, 1993 - June 30, 1994). (2) Most implementation data is based on State program activities, funding and/or requirements. (3) BMP definitions are from "Maryland's Tributary Strategies for Nutrient Reduction" report, 1995. (4) BMP implementation data is from the Maryland Interagecy Tracking Subcommittee. (5) Efficiencies are average statewide efficiencies. (6) Ongoing improvements to the Watershed Model shift the expected reductions of BMPs with efficiencies listed as "land use conversions" slightly.

Middle Potomac

Tree Planting

TS Goal: 840 acres
Definition: Includes any tree plantings on any site except those along rivers and streams.
Applied to: urban land
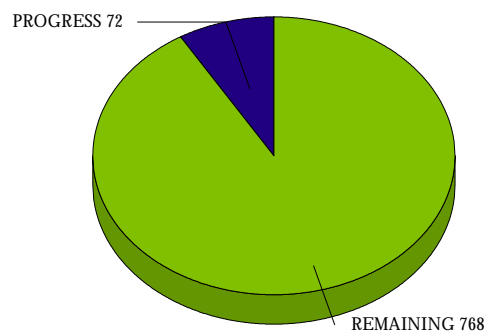**Nitrogen Efficiency:** 0 reduction
Phosphorus Efficiency: 0 reduction
BMP Rankings:
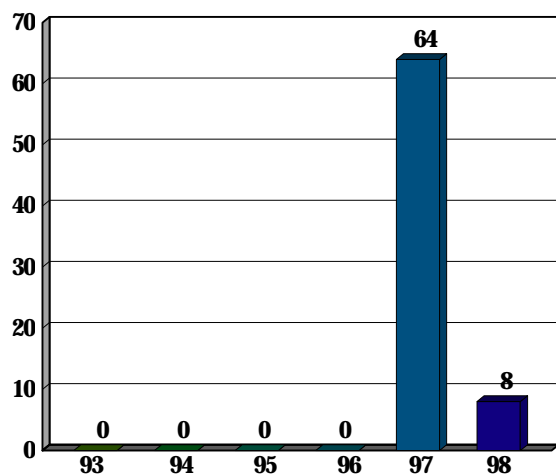   **Ability to Reduce Nutrients:** Low
    Importance in Statewide Strategy:
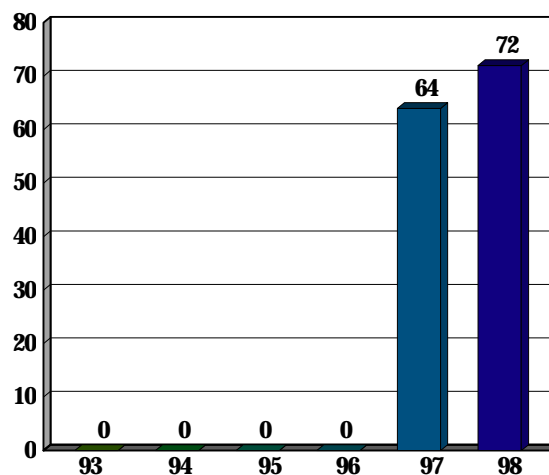   **Nitrogen** - Low
        Phosphorus - Low

PROGRESS 72

REMAINING 768

1998 Progress for Tree Planting
(as a percentage of TS goal, labeled units are acres)

Implementation Record
(acres)

Annual

Year	93	94	95	96	97	98
Value	0	0	0	0	64	8

Cumulative

Year	93	94	95	96	97	98
Value	0	0	0	0	64	72

NOTES: (1) Implementation data is organized by State fiscal year (i.e. 1994 = July 1, 1993 - June 30, 1994). (2) Most implementation data is based on State program activities, funding and/or requirements. (3) BMP definitions are from "Maryland's Tributary Strategies for Nutrient Reduction" report, 1995. (4) BMP implementation data is from the Maryland Interagecy Tracking Subcommittee. (5) Efficiencies are average statewide efficiencies. (6) Ongoing improvements to the Watershed Model shift the expected reductions of BMPs with efficiencies listed as "land use conversions" slightly.

Middle Potomac

Enhanced Stormwater Management

TS Goal: 17,577 acres
Definition: The regulatory requirement for the control of Stormwater on all new development, including maintenance on new and existing facilities. Enhancements emphasize water quality controls in addition to water quantity controls.
Applied to: urban land
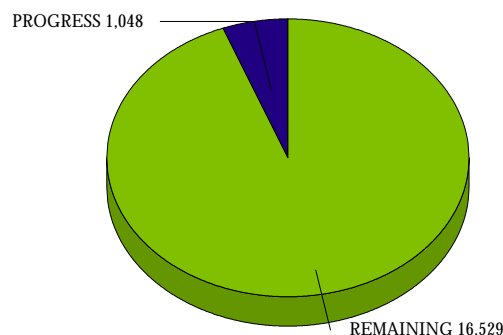**Nitrogen Efficiency:** 33% reduction
Phosphorus Efficiency: 46% reduction
BMP Rankings:
    Ability to Reduce Nutrients: Medium
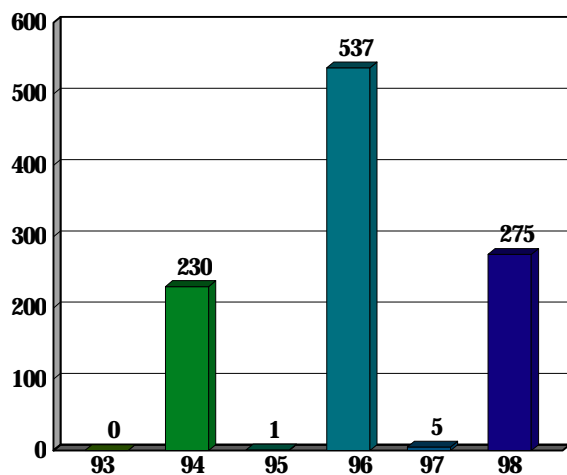   **Importance in Statewide Strategy:**
        Nitrogen - High
        Phosphorus - Medium

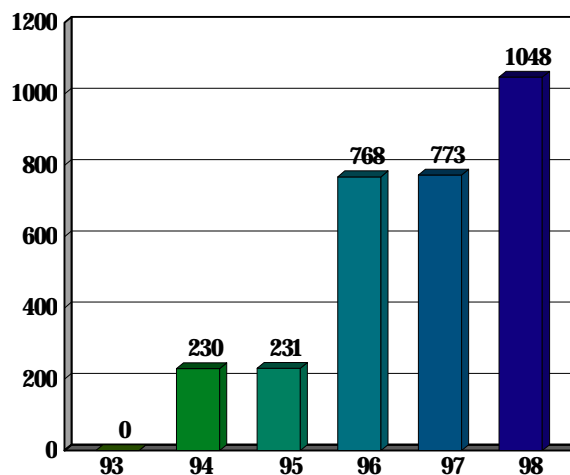PROGRESS 1,048
REMAINING 16,529

**1998 Progress for Enhanced Stormwater Management
(as a percentage of TS goal, labeled units are acres)**

Implementation Record
(acres)

Annual

Annual values: 93: 0, 94: 230, 95: 1, 96: 537, 97: 5, 98: 275

Cumulative

Cumulative values: 93: 0, 94: 230, 95: 231, 96: 768, 97: 773, 98: 1048

NOTES: (1) Implementation data is organized by State fiscal year (i.e. 1994 = July 1, 1993 - June 30, 1994). (2) Most implementation data is based on State program activities, funding and/or requirements. (3) BMP definitions are from "Maryland's Tributary Strategies for Nutrient Reduction" report, 1995. (4) BMP implementation data is from the Maryland Interagecy Tracking Subcommittee. (5) Efficiencies are average statewide efficiencies. (6) Ongoing improvements to the Watershed Model shift the expected reductions of BMPs with efficiencies listed as "land use conversions" slightly.

Middle Potomac

Erosion and Sediment Control

TS Goal: 2,511 acres
Definition: The regulatory requirement for erosion and sediment control on all new development over 5,000 square feet. Reduces the high nutrient and suspended sediment loads during the transitory construction phase.
Applied to: urban land
Nitrogen Efficiency: 33% reduction
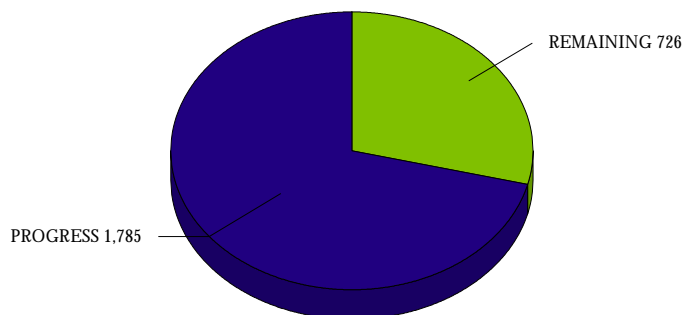**Phosphorus Efficiency:** 50% reduction
BMP Rankings:
    Ability to Reduce Nutrients: Medium
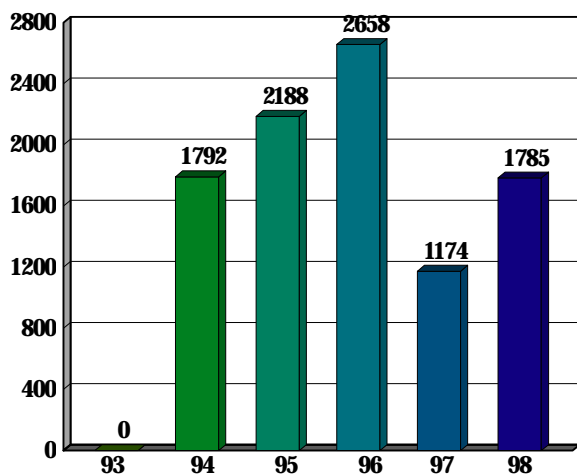   **Importance in Statewide Strategy:**
            Nitrogen - Medium
            Phosphorus - Low
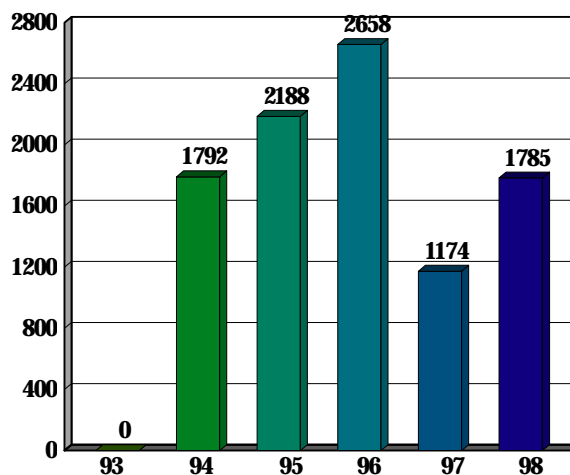
REMAINING 726

PROGRESS 1,785

1998 Progress for Erosion and Sediment Control
(as a percentage of TS goal, labeled units are acres)

Implementation Record
(acres)

Annual

Year	Value
93	0
94	1792
95	2188
96	2658
97	1174
98	1785

Cumulative

Year	Value
93	0
94	1792
95	2188
96	2658
97	1174
98	1785

NOTES: (1) Implementation data is organized by State fiscal year (i.e. 1994 = July 1, 1993 - June 30, 1994). (2) Most implementation data is based on State program activities, funding and/or requirements. (3) BMP definitions are from "Maryland's Tributary Strategies for Nutrient Reduction" report, 1995. (4) BMP implementation data is from the Maryland Interagecy Tracking Subcommittee. (5) Efficiencies are average statewide efficiencies. (6) Ongoing improvements to the Watershed Model shift the expected reductions of BMPs with efficiencies listed as "land use conversions" slightly.

Middle Potomac

Septic Connections

TS Goal: 229 systems
Definition: The connection of failing septic systems to sewer lines.
Applied to: urban land
Nitrogen Efficiency: 55% reduction
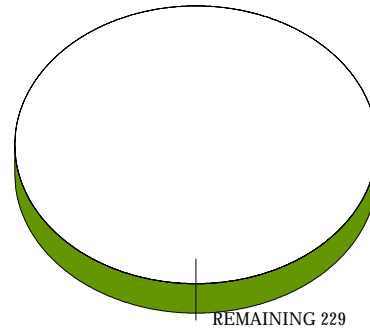**Phosphorus Efficiency:** no reduction
BMP Rankings:
    Ability to Reduce Nutrients: Medium
    Importance in Statewide Strategy:
        Nitrogen - Medium
        Phosphorus - n/a

REMAINING 229

1998 Progress for Septic Connections
(as a percentage of TS goal, labeled units are systems)

Implementation Record
(systems)

Annual

Cumulative

NOTES: (1) Implementation data is organized by State fiscal year (i.e. 1994 = July 1, 1993 - June 30, 1994). (2) Most implementation data is based on State program activities, funding and/or requirements. (3) BMP definitions are from "Maryland's Tributary Strategies for Nutrient Reduction" report, 1995. (4) BMP implementation data is from the Maryland Interagecy Tracking Subcommittee. (5) Efficiencies are average statewide efficiencies. (6) Ongoing improvements to the Watershed Model shift the expected reductions of BMPs with efficiencies listed as "land use conversions" slightly.

Middle Potomac

Septic Denitrification

TS Goal: 34 systems
Definition: The installation of new systems or retrofitting of existing systems with technology to remove nitrogen from individual systems.
Applied to: urban land
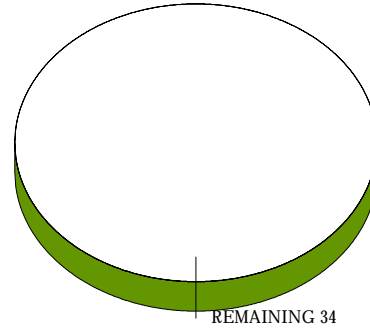**Nitrogen Efficiency:** 50% reduction
Phosphorus Efficiency: no reduction
BMP Rankings:
    Ability to Reduce Nutrients: Medium
    Importance in Statewide Strategy:
        Nitrogen - Low
        Phosphorus - n/a

REMAINING 34

1998 Progress for Septic Denitrification
(as a percentage of TS goal, labeled units are systems)

Implementation Record
(systems)

Annual

Cumulative

NOTES: (1) Implementation data is organized by State fiscal year (i.e. 1994 = July 1, 1993 - June 30, 1994). (2) Most implementation data is based on State program activities, funding and/or requirements. (3) BMP definitions are from "Maryland's Tributary Strategies for Nutrient Reduction" report, 1995. (4) BMP implementation data is from the Maryland Interagecy Tracking Subcommittee. (5) Efficiencies are average statewide efficiencies. (6) Ongoing improvements to the Watershed Model shift the expected reductions of BMPs with efficiencies listed as "land use conversions" slightly.

Middle Potomac

Septic Pumping

TS Goal: 699 systems
Definition: Pumping individual septic systems once every three years, the average routine maintenance of these systems.
Applied to: urban land
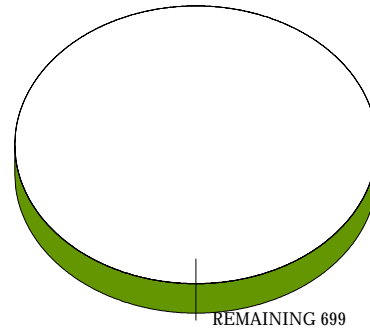**Nitrogen Efficiency:** 5% reduction
Phosphorus Efficiency: no reduction
BMP Rankings:
    Ability to Reduce Nutrients: Low
    Importance in Statewide Strategy:
        Nitrogen - Low
        Phosphorus - n/a

REMAINING 699

1998 Progress for Septic Pumping
(as a percentage of TS goal, labeled units are systems)

Implementation Record
(systems)

Annual

Cumulative

NOTES: (1) Implementation data is organized by State fiscal year (i.e. 1994 = July 1, 1993 - June 30, 1994). (2) Most implementation data is based on State program activities, funding and/or requirements. (3) BMP definitions are from "Maryland's Tributary Strategies for Nutrient Reduction" report, 1995. (4) BMP implementation data is from the Maryland Interagecy Tracking Subcommittee. (5) Efficiencies are average statewide efficiencies. (6) Ongoing improvements to the Watershed Model shift the expected reductions of BMPs with efficiencies listed as "land use conversions" slightly.

Middle Potomac

Stormwater Management Conversion

TS Goal: 1,966 acres
Definition: Conversion of dry ponds for Stormwater management to extended detention or retention facilities which are more effective at nutrient removal.
Applied to: urban land
Nitrogen Efficiency: 33% reduction
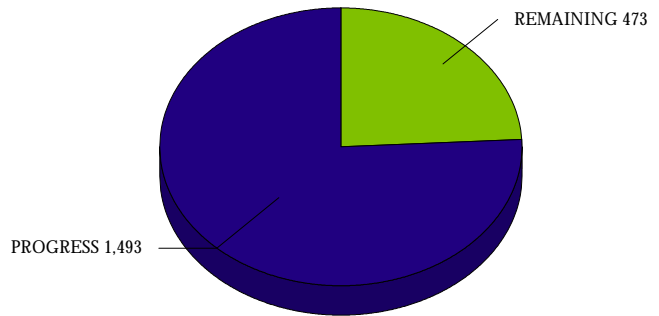**Phosphorus Efficiency:** 46% reduction
BMP Rankings:
    Ability to Reduce Nutrients: Medium
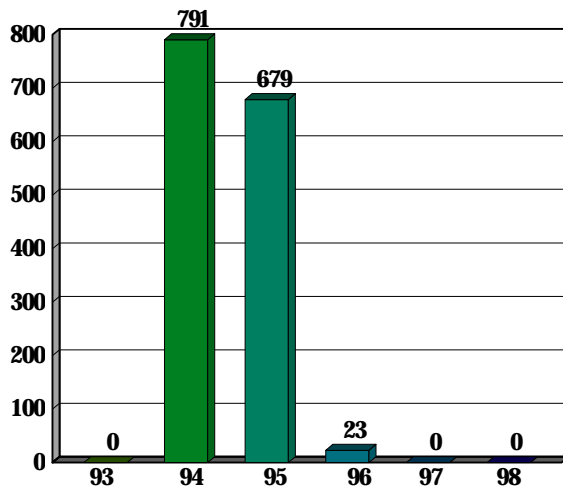   **Importance in Statewide Strategy:**
        Nitrogen - Low
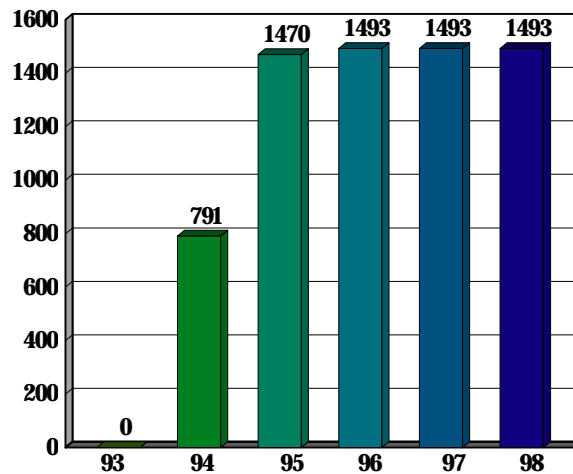   **Phosphorus** - Low

REMAINING 473

PROGRESS 1,493

1998 Progress for Stormwater Management Conversion
(as a percentage of TS goal, labeled units are acres)

Implementation Record
(acres)

Annual

Year	Value
93	0
94	791
95	679
96	23
97	0
98	0

Cumulative

Year	Value
93	0
94	791
95	1470
96	1493
97	1493
98	1493

NOTES: (1) Implementation data is organized by State fiscal year (i.e. 1994 = July 1, 1993 - June 30, 1994). (2) Most implementation data is based on State program activities, funding and/or requirements. (3) BMP definitions are from "Maryland's Tributary Strategies for Nutrient Reduction" report, 1995. (4) BMP implementation data is from the Maryland Interagecy Tracking Subcommittee. (5) Efficiencies are average statewide efficiencies. (6) Ongoing improvements to the Watershed Model shift the expected reductions of BMPs with efficiencies listed as "land use conversions" slightly.

Middl*e* Potomac

Stormwater Management Retrofits

TS Goal: 2,014 acres
Definition: Construction of Stormwater facilities on lands previously developed without such facilities.
Applied to: urban land
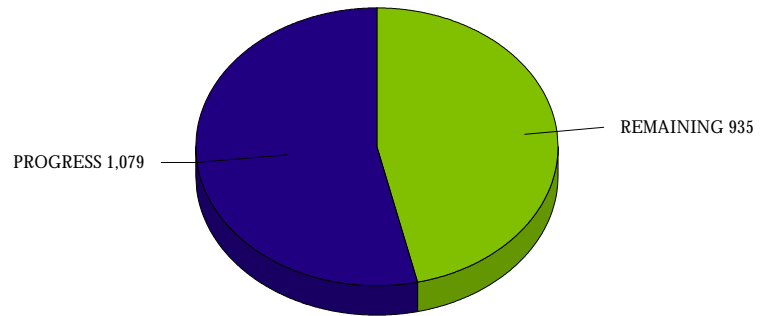**Nitrogen Efficiency:** 33% reduction
Phosphorus Efficiency: 46% reduction
BMP Rankings:
   Ability to Reduce Nutrients: Medium
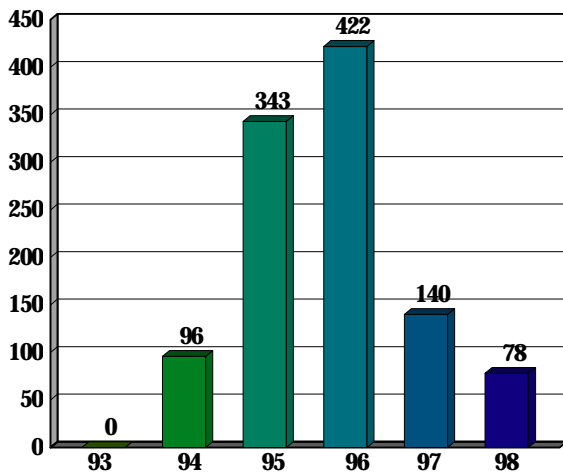   **Importance in Statewide Strategy:**
       Nitrogen - Low
       Phosphorus - Low
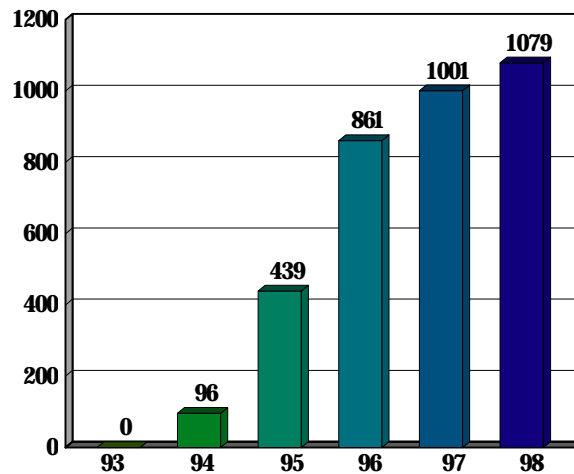

PROGRESS 1,079

REMAINING 935

1998 Progress for Stormwater Management Retrofits
(as a percentage of TS goal, labeled units are acres)

Implementation Record
(acres)

Annual

Cumulative

NOTES: (1) Implementation data is organized by State fiscal year (i.e. 1994 = July 1, 1993 - June 30, 1994). (2) Most implementation data is based on State program activities, funding and/or requirements. (3) BMP definitions are from "Maryland's Tributary Strategies for Nutrient Reduction" report, 1995. (4) BMP implementation data is from the Maryland Interagecy Tracking Subcommittee. (5) Efficiencies are average statewide efficiencies. (6) Ongoing improvements to the Watershed Model shift the expected reductions of BMPs with efficiencies listed as "land use conversions" slightly.

Middle Potomac

Urban Nutrient Management

TS Goal: 27,414 acres
Definition: A public education program to reduce excess lawn fertilizer use, targeted at suburban residents and businesses.
Applied to: urban land
Nitrogen Efficiency: 17% reduction
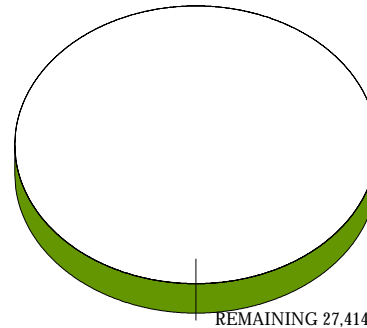**Phosphorus Efficiency:** 22% reduction
BMP Rankings:
    Ability to Reduce Nutrients: Low
    Importance in Statewide Strategy:
        Nitrogen - Medium
        Phosphorus - Low

REMAINING 27,414

1998 Progress for Urban Nutrient Management
(as a percentage of TS goal, labeled units are acres)

Implementation Record
(acres)

Annual

Cumulative

NOTES: (1) Implementation data is organized by State fiscal year (i.e. 1994 = July 1, 1993 - June 30, 1994). (2) Most implementation data is based on State program activities, funding and/or requirements. (3) BMP definitions are from "Maryland's Tributary Strategies for Nutrient Reduction" report, 1995. (4) BMP implementation data is from the Maryland Interagecy Tracking Subcommittee. (5) Efficiencies are average statewide efficiencies. (6) Ongoing improvements to the Watershed Model shift the expected reductions of BMPs with efficiencies listed as "land use conversions" slightly.